

AN ANDROID BASED ONLINE PARLOUR MANAGEMENT SYSTEM

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This Report Presented in Partial Fulfillment of the Requirements for the
Requirements for the Degree of Bachelor of Science in Computer Science
and Engineering

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DHAKA, BANGLADESH

DECEMBER, 2018

APPROVAL

This Project Titled “Online Parlour Management System.” Submitted by Tusnuva Ansary . ID:153-15-6458 to the Department of Computer Science and Engineering. Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 24th November 2018.

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DECLARATION

We hereby declare that, this project has been done by me under the supervision of **Masud Rabbani, Lecturer, Department of CSE**, Daffodil International University. Co-supervised by **Anup Majumder, Lecturer, Department of CSE**, Daffodil International University. I also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ACKNOWLEDGEMENT

I express our heartiest thanks and Excellency to the Almighty for giving us the opportunity to make the great things for blind people.

I really grateful and wish my regards to our honorable **Masud Rabbani , Lecturer and Anup Majumder, Lecturer**, Department of CSE, Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor and co-supervisor in the field of “Android Application” to carry out this project. Their endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to **Dr. Syed Akhter Hossain, Professor & Head, Department of CSE**, for his kind help to finish our project and also to other faculty members and the staffs of CSE department of Daffodil International University.

We would like to thank our entire varsity mate in Daffodil International University, who took part in this discuss while completing the project work.

Finally, we must acknowledge with due respect the constant support of our parents.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Now a day's technology took place all over the world. Peoples are attracted to an easy life! Technology makes life much easier .Everyone is searching for easy and fast service on real life, especially women!

In our country there are thousands of app are created to make life easier and faster. There are so many apps that really works for us and saving our time and money. My idea was saving women's time and money about parlour. Because most of the women go to parlour minimum ones a week. I think it's a great idea to create an apps and save some time and money for women. This application will help women to save their time to find best beauty parlour around them.

1.2 Motivation

There are thousands of beauty parlour around the city, finding a beauty service is hard and confusing for women. Managing beauty parlour customer for owner is also a tough task. Basically every parlour service took long time for their services. Customer has to wait long time to have any service in beauty parlour!

Those reason motivate me to create an apps which can help owner and customer both to save time, and owner can manage customer so easily.

1.3 Objective

Serving people through apps is not a new idea, but there are a possibility to serve women through an app. A huge range of women get served by beauty parlour services. There are thousands of beauty parlour exist in our city, this makes women so confused! With rating system customer can rate the service, and rest of customer can see it through the app.

GPS system will help them to find location so easily. Booking system will help women to book their service. Users can know the service price and time also. If they have any problem with booking, the can easily cancel it.

1.4 Expected Outcome

- Online parlour service for women
- Parlour management system for owner
- Rating system for customer
- Several type of payment system

CHAPTER 2

BACKGROUND

2.1 About my app

This is basically a management app for owner and a service app for customer. By using this app user can find best beauty parlour around them. And administrator can control all the customer in one place. Customer can pay through several payment system like Bkash , DBBL etc. I try to my level best to improve this and this application is beneficial for all the women. This application is easy and so user friendly.

2.2 Scope of the Project

Basically this app based on management system and service together. I think users will be happy for this because of the facilities of this app. In this app every function is so easy to use and the design is so user friendly. I hope user will find it as very useful and time saving app .I use android studio to write and compile this app. Overall it will be very helpful for women who lives in the city.

2.3 Related Works

When I decided to build this app and website as my final year project, I looked through Play-store and found no such app that is like mine[2]. However, there are apps which has one or two features like us but not like this, that's the main different concept of this app[1]. But I try my best to improve something which really look like different, but our country is still seeking something like this. I try to bring some new features and I use cloud storage to store all app data.

2.4 Challenges

When any developer wants to make anything different types of thinking, then the developer has always to face some different types of challenges, contest, competition and obstacles. As like this situation, my project has some different types of challenges. My project is about service and management together. Today's world depended on social media, people are trying to get most of the information from there. People might get wrong information from social sites, giving customer authentic information about parlour and their services is the most complex thing I had face. Still it's a challenge for

me to give them suggestion to find best beauty parlour around the city. I believe that I can overcome this challenge and give people a good service through this application.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Model

Business process modeling (BPM) is the activity of representing the process of an enterprise so the current process can be improved, automated and analyzed. The term 'business model' is thus used in very familiar way and for a broad range of informal descriptions to represent core aspects of including purpose, structures, operational process and policies. The main characteristics of the methodology is based on diagram as 'Flow diagram'. Here we are trying to describe our projects business model using Data Flow Diagram. Normally, Data Flow Diagram [6] describes form Google and how data flow is processed through a system or project.

A DFD shows what kind of information will be input to and output from the system, how the data will advance through the system, and where the data will be stored. It does not show information about process timing or whether processes will operate in sequence or in parallel, unlike a traditional structure flowchart which focused on control flow, it's like as diagram. Which stay in all application. Because this is the main structure for an application and for understanding. By business model a user can realize how can it works and that's the main point. Where it uses and where its use-case. A developer always tries to invent his/her business model by his/her own way. Because every application is unique that's means dissimilar with each other. An UML activity workflow diagram, which presents both control and data flows as a unified model.

Figure 3.1 shown us the data flow diagram of online parlour management system. There are two selection option in the interface. One is for users, and another one is for administration. User and Admin functions are working differently. Both of them meet at end point where payment method is completed.

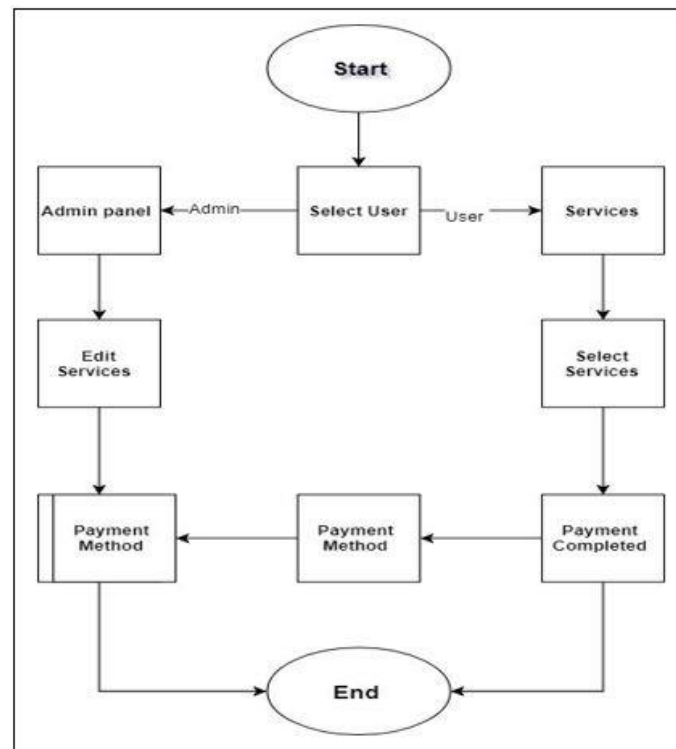


Figure 3.1: DFD of OPMS

3.2 Requirement Analysis

Requirement Analysis is basically the process of analyzing user expectation for a new system. These features, called requirements, must be quantifiable, relevant and detailed. Requirements analysis involves frequent communication with system users to determine specific feature expectations. Resolution of conflict or ambiguity in requirements as demanded by the various users or groups of users, avoidance of feature creep and documentation of all aspects of the project development process from start to finish. For the project development process, there are two types of requirements. One is functional requirements and another is non-functional requirement.

3.3 Functional Requirement

Functional Requirement, this is the requirement which is related to the technical part of the system. This application has a lot of functional requirements like maintain users from administration panel and maintain all the data from user input in database, which I stored in cloud storage.

3.4 Non-functional Requirement

Non-functional requirement is a requirement that specifies criteria that can used to judge the operation of a system in particular conditions, rather than specific behaviors as like the application is how much efficient, user friendly, performance issue of the application etc. From the point of view of our system, the application has many functional requirements as more efficient, relevant, optimize performance, memory consumer and smoother operation, loading on quickly and parsing data from online as soon as possible. Applications user interface is also so user friendly and gorgeous for excellent user experience. Non-functional many build in function also use in here.

3.5 Use Case

Figure 3.2 describe the user functionality of a user. User can select login to give their information. After giving valid information, user can order the service from Service Order menu. After ordering the service the can select check In/Out option. After getting the services user can rate the service using Rating option.

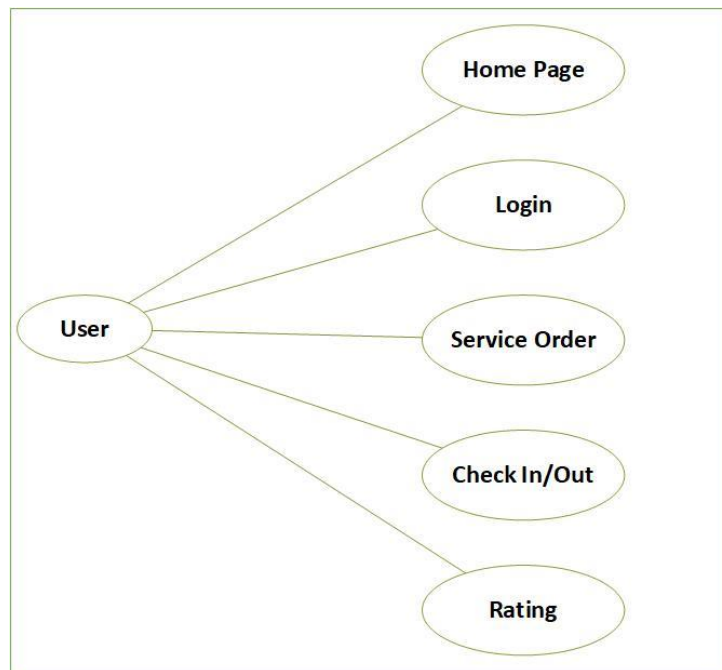


Figure 3.2: Use Case of this application for user

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Figure 3.3 shown us the Admin Use Case of the application. Admin has lot of functionality. Admin can create services name by using Service Add option. Admin also can view the services list and modify it using the View Service options. Admin can see the waiting customer by tapping the Wait for service option. Admin can see and interact with payment system by tapping Client Payment option. Old service option work like log file, admin can see the old services via Old Service option of this application.

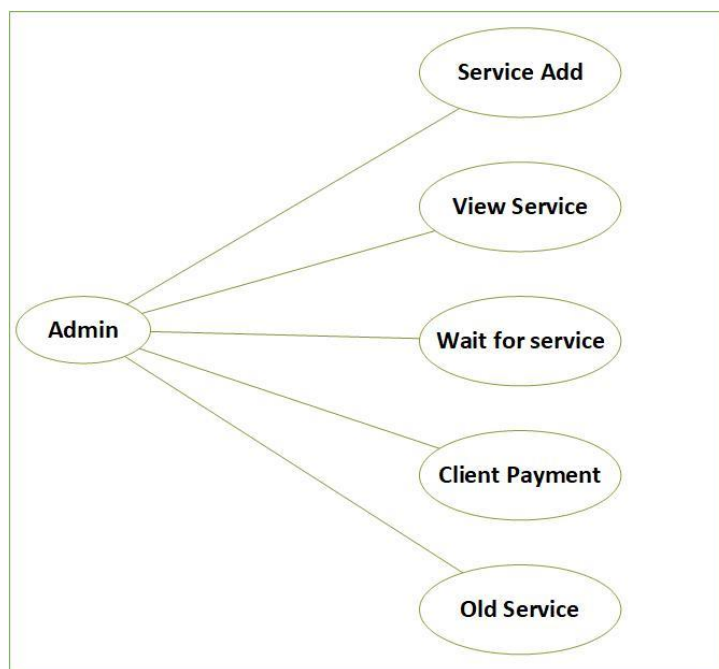


Figure 3.3: Use Case of this application for Admin

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CHAPTER 4

DESIGN REQUERMENT

4.1 Design Requirements

1. In my system, there is authentication system for admin for security but no authentication for users.
2. I design profile system with phone number that mean admin can see user phone numbers.
3. Admin can add any service and modify it
4. User can't create any service , the can only see the services
5. Admin don't have any control on rating system, only users can rate the services.
6. I created this app dynamic way, so I can improve it in future.

4.2 Front-end Design

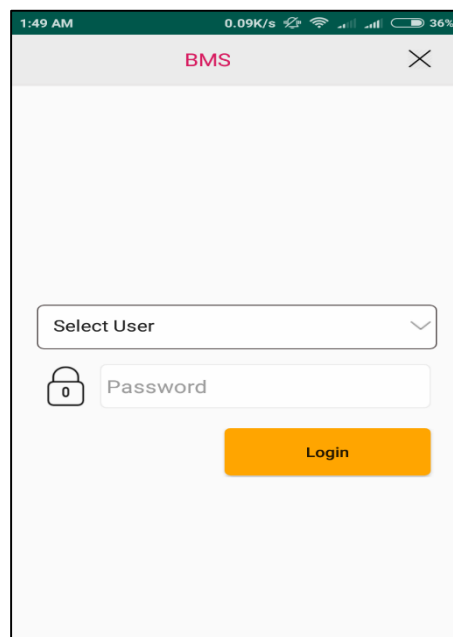


Figure 4.1: User Interface for both (User and Administration)

The front-end design is where user can see everything in the application. On the other hand where user see the interface when it open or run. It's so important to keep front-end design clean and beautiful and easy to use for users. Most of the users expect a simple and easy user interface.

If user interface is so hard to understand and use to user, there is a huge possibility that user will reject the app to user.

Figure 4.1 shown us the user interface for User and Administration. Admin can login to the system from here. User also can use it to get the parlour services. Admin has to give the valid password to login into the application.

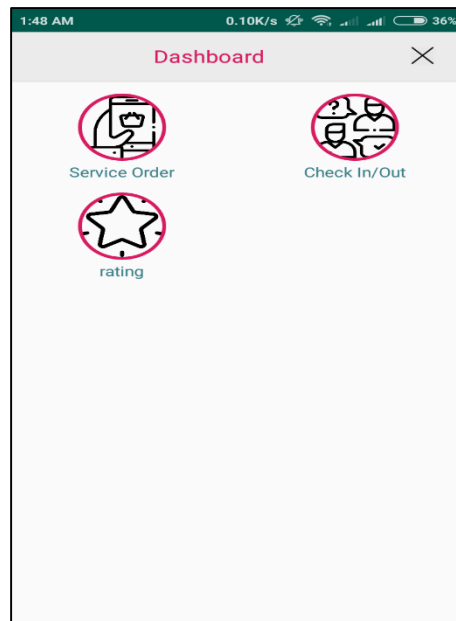


Figure 4.2: User Interface for users

Users can order service, rate the service, and also can check in/out from this section. In this case, only user can use the rating option .Ones rating submitted by users, other user can see it. Admin don't have any control on rating.

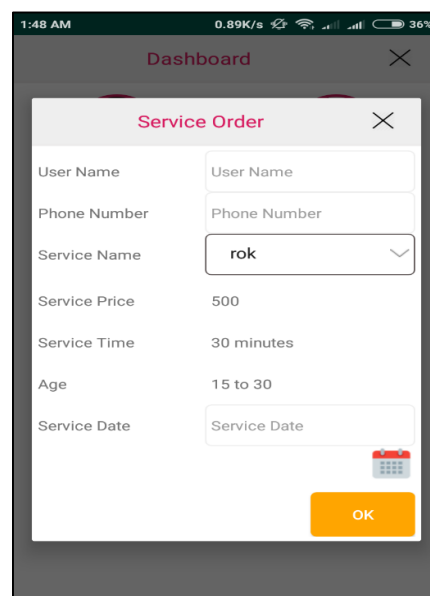
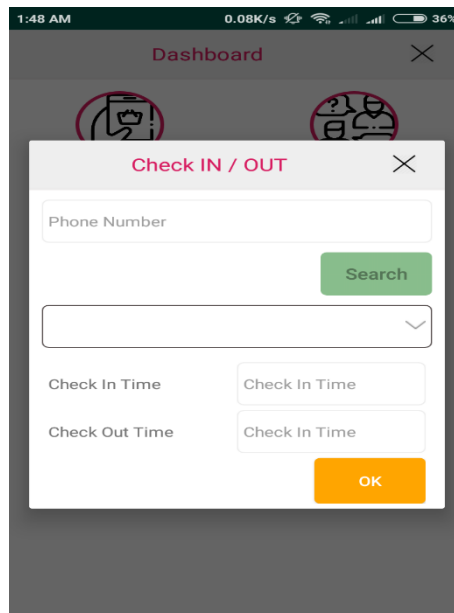


Figure 4.3: Selecting service

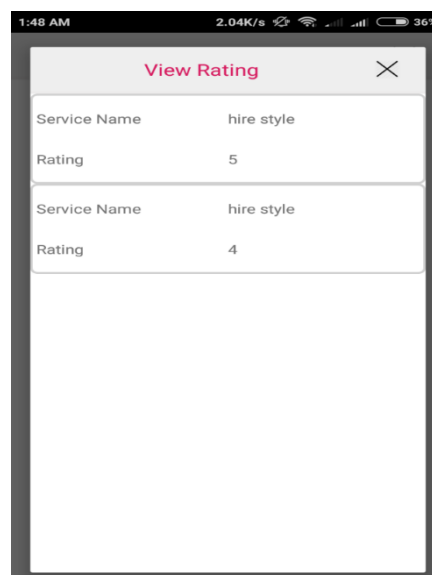
User can select service by filling this form, they will know the service name, service price, service time from here. User can give their information by using User name, Phone Number. The can chose the service by taping the Service Name option. User also can see some information about the service like Service Price, Service Time, and Age. Finally user can chose service date by using Service Date option.



The screenshot shows a mobile application interface. At the top, a status bar displays '1:48 AM', '0.08K/s', and a 36% battery level. Below this is a 'Dashboard' header with a close button. The main content area features a 'Check IN / OUT' modal form. This form includes a 'Phone Number' input field, a green 'Search' button, a dropdown menu, and two time selection fields labeled 'Check In Time' and 'Check Out Time'. An orange 'OK' button is positioned at the bottom right of the form.

Figure 4.4: Check IN/OUT

User check in/out time selection is so important for services. User also can cancel the service if they want. User can search with phone number by using Search option .



The screenshot shows a mobile application interface. At the top, a status bar displays '1:48 AM', '2.04K/s', and a 36% battery level. Below this is a 'View Rating' modal form. This form displays two service entries, each with a 'Service Name' (hire style) and a 'Rating' (5 and 4 respectively). The form has a close button at the top right.

Figure 4.5: View Rating

Users can see others service rating here, this will help user to select the best service and it will save their time as well.

This panel will help admin to manage all the users together. Admin can add service, view service, edit service, confirm payment, and log of old services.

All the function for admin can't be shown for user. Only admin can see it after successfully login

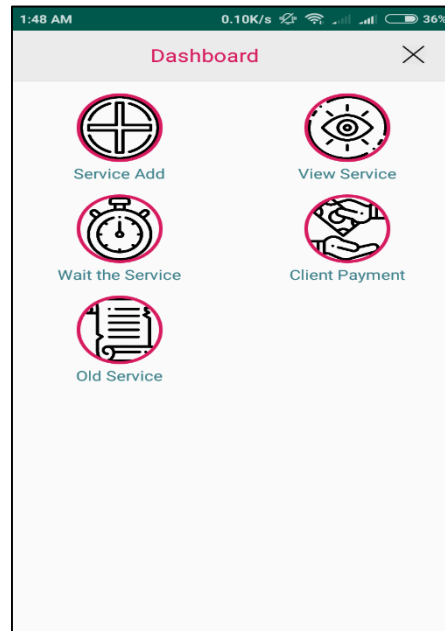


Figure 4.6: Admin panel

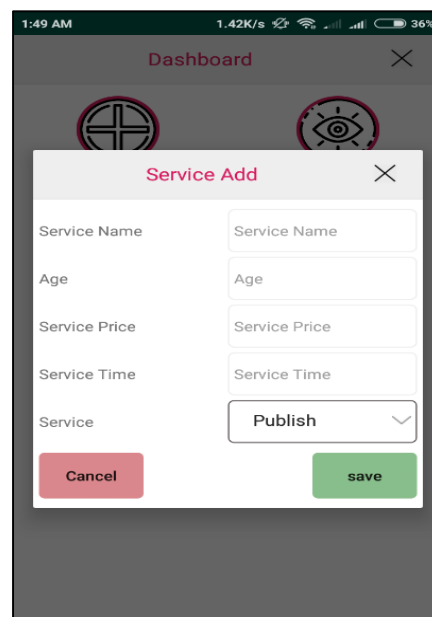


Figure 4.7: Adding new service

Admin can add all available service here with service name, service price, service time. Admin also can modify and delete service if needed. Admin can save any service as draft if that service is not available. Any service will not be published if user don't select Publish option before saving it using Save button.

Admin can view all the services from here and update it if needed! If admin wants to change anything from here like price or service time or service name, admin can do it by using Update button.

The screenshot shows a mobile application interface titled "View Service". It contains two service entries. Each entry has a "Publish" button on the left and an "Update" button on the right. The first entry has the following details: Service Name: rok, Service Price: 15 to 30, Age: 500, Service Time: 30 minutes. The second entry has: Service Name: hire style, Service Price: 33, Age: 2000, Service Time: 1 hours.

Service Name	Service Price	Age	Service Time	Action
rok	15 to 30	500	30 minutes	Publish / Update
hire style	33	2000	1 hours	Publish / Update

Figure 4.8: Screenshot of View Service

The screenshot shows a mobile application interface titled "User Waiting". It displays a single user's booking details. At the bottom, there are two buttons: "Delete" and "Received".

User Name	Phone Number	Service Name	Service Price	Time	Action
mim	spa	01946798768	1000	17-10-2018 12:09 PM	Delete / Received

Figure 4.9: Screenshot of Waiting Users

After booking a service from user, admin can see it and confirm it by tapping Received option. Admin also can call the user for service time and update schedule.

This system has different payment option for user, user can select whatever they want. Users can pay in cash, Bkash , DBBL . It depend on users.

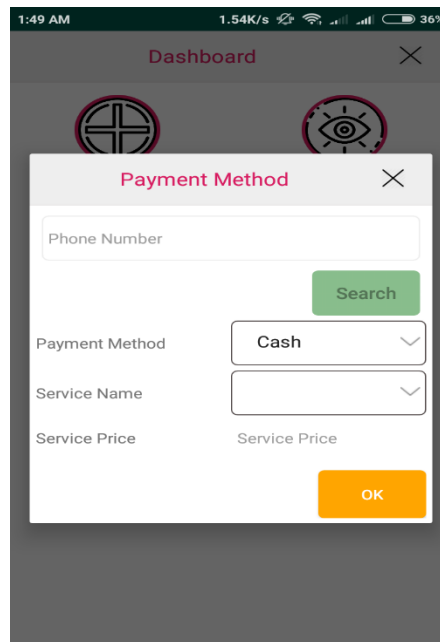


Figure 4.10 Screenshot of Payment Method

4.3 Mobile Application Version

My application is for mobile users, for the women who has smartphone. To create an application for android operating system, I worked with very popular tools like android studio, emulator, SQL for database. To create an application it depends on a developer how he create because of different available tools on market. However mostly work of this project is done by Android Studio.

4.4 Android Studio

Android studio [11] is the official integrated development environment(IDE) for Google's Android operating system, built on Jet Brains IntelliJ IDEA software and Android SDK for both developing our android application and also testing our android application when need to run for seeing output.

4.5 Android Overview

Android is a comprehensive platform, which means it is a complete software stack for a mobile device. It provides all the tools framework for developing mobile application simply, quickly and easily. We design our application with Extensible Markup Language (XML), connection with database server with Java Language in Android Studio. Android is also open source platform where developer can make any types of user interface which the developer needs to design his/her application. The developer can write any programming language for his/her application in android studio.

4.6 Android SDK

Android development starts with android SDK (Software Development Kit) [12]. Android SDK is a set of collection of development tools used to develop and build of any kind of android application for android platform. That means Android SDK is essential tools for both developing and building any android application. We use security to file uploads and downloads for your Firebase apps, regardless of network quality. You can use our SDKs to store images, audio, video, or other user-generated content. On the server, you can use Google Cloud Storage, to access the same files.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Testing

This table is describing the implementation and testing the application of different smartphone and different android operating system. I tested the application with five different version of android operating system. All of the version is working fine with my application. Installation process, input, output is working fine. This table also contain the tested date information from begging to the end of this project.

Test Case	Test Input	Expected Output	Actual Output	Result	Tested On
1.Install Application	Tested on Various – 1. Jelly Bean (4,1-4.3.1) 2. KitKat (4.4-4.4.4) 3. Lollipop (5.5-5.0.2) 4. Marshmallow (6.0) 5. Nougat (7.0-7.1)	Successfully install all those versions.	Install successful	Passed	20/10/2018
2.Event Create	Create new event with proper information.	Create new event and show in list.	Show the created event successfully.	Passed	23/10/2018
Compile	Compile successfully all code.	Show the actual result.	Actual output.	Passed	25/10/2018

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Conclusion

My android based mobile application is successfully implemented now, I test my application on various smart phone. I saw my application work properly and fulfill all the requirements. I hope users mostly women will find it helpful and get their beauty service through this application.

The design is very simple and easy of this application, anyone can understand the user interface of this application. I don't think users need any tutorial to use this application. I tried my best to complete all requirements for my application. I hope users will use it and get their desired service.

6.2 Future Scope

There are a lots of opportunity with this project. In future I'm thinking to improve this application with few new features .Here is the list of my future plan with this application.

- Include map in this application
- Find easy route for customer to parlour
- Create a monthly revenue feature for owner

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